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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,970	03/19/2004	Kazuhisa Nishida	01480083BA	6473

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EXAMINER

DONG, DALEI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/803,970	Applicant(s) NISHIDA, KAZUHISA	
	Examiner Dalei Dong	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 17-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/2004, 7/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the dedicated jig and YAG laser and the claimed method of manufacturing a high-pressure discharge lamp must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 19 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,545,430 to Ono.

Regarding to claim 19, Ono discloses in Figures 3-5, 8 and 10, a method of manufacturing a high-pressure discharge lamp (100), comprising the steps of: combining an electrode metal rod (21) and a heat radiating coil (23) into an electrode assembly (2);

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(22); and machining the region of the end (22) of the metal rod (21) into a nipple (24) (see column 7, lines 3-5).

Regarding to claim 25, Ono discloses in Figures 3-5, 8 and 10, the nipple (24) is a non-cylindrical nipple (24).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17, 18 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,545,430 to Ono in view of U.S. Patent No. 5,186,671 to Nagasawa.

Regarding to claim 17, Ono discloses in Figures 3-5, 8 and 10, a method of manufacturing a high-pressure discharge lamp (100), comprising the step of combining an electrode metal rod (21) and a heat radiating coil (23) into an electrode assembly (2), turning the tip end (22) into a solid with a smooth surface, leaving a central region of the tip end (22) of the metal rod (21), thus producing a melted tip end (22); and machining the left central region of the tip end (22) of the metal rod (21) into a nipple (24) (see column 6, line 59 to column 7, line 38).

However, Ono does not disclose placing the electrode assembly on a predetermined jig, machining the electrode assembly with a YAG laser beam while the electrode assembly is in rotation.

Nagasawa teaches in Figures 2 and 3, a method of manufacturing a high-pressure discharge lamp, comprising the step of: placing the electrode assembly (17) on a predetermined jig (54); machining the electrode assembly (17) with a YAG laser beam (60) (see column 3, lines 14 to column 4, line 58).

Furthermore, Nagasawa teaches that it is old and well known in the art to rotate the electrode assembly during the laser beam process (see column 1, lines 36-43) for the purpose of producing stable discharges and has excellent durability.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the jig and laser of Nagasawa for the manufacturing process of Ono in order to produce stable discharges and has excellent durability.

Regarding to claim 18, Ono discloses in Figures 3-5, 8 and 10, the nipple (24) is a non-cylindrical nipple.

Regarding to claim 20, Ono discloses in Figures 3-5, 8 and 10, the combination of the electrode metal rod (21) and heat radiating coil (23) into an electrode assembly (2). Nagasawa teaches in Figures 2 and 3, use of a jig to manufacture the electrode assembly (17) and motivation to combine is the same as in claim 17.

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Regarding to claim 21, Nagasawa teaches in Figures 2 and 3, the electrode assembly (17) is machined with a laser beam (60).

Regarding to claim 22, Nagasawa teaches in Figures 2 and 3, the laser beam is a YAG laser beam (see column 3, lines 27-28).

Regarding to claim 23, Nagasawa teaches in Figures 2 and 3, that it is old and well known in the art to rotate the electrode assembly while it is machined (see column 1, lines 36-43).

Regarding to claim 24, Ono discloses in Figures 3-5, 8 and 10, the electrode assembly (2) is machined to turn an end of the heating radiating coil (23) into a solid (22) and Nagasawa further teaches in Figures 2 and 3, that it is old and well known in the art to rotate the electrode assembly while it is machined (see column 1, lines 36-43) and the motivation to combine is the same as in claim 17.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of a method of manufacturing a high-pressure discharge lamp.

U.S. Patent No. 4,525,379 to Hübner.

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U.S. Patent No. 6,705,914 to Tsutatani.

U.S. Patent No. 6,817,920 to Furuta.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

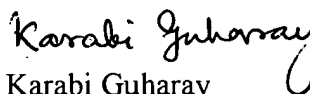
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.D.

March 3, 2006

  
Karabi Guharay  
Primary Examiner  
Art Unit 2879